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on claim 44 and cover many of the particular embodiments set forth in original claims 2-27. In this regard claims 59-61 cover embodiments of the invention shown in Figure 1 and particularly the recycle streams obtained from the optional concentration step.

New claim 69 covers a method of treating a waste material containing gelatin in which residual oils and/or particulates are removed from the solvent based layer to form a second liquid which is then concentrated by a short path distillation to form a third liquid having a reduced amount of solvent. Support for this claim can be found in the specification beginning at page 18, line 4. New claim 70 covers a method of treating the solvent containing waste stream directly by hot filtration as disclosed in Figure 1 and the accompanying description including page 9, lines 15-19.

It is respectfully submitted that new claims 44-70 are fully supported in the application as filed and entry thereof is deemed proper and is respectfully requested.

It is noted that the present application is subject to a restriction requirement wherein claims 1-27 have been prosecuted in the present application and apparatus claims 28-43 have been withdrawn from further consideration. In view of the restriction requirement, Applicant hereby confirms the election of method claims 1-27 and hereby cancels apparatus claims 28-43, specifically reserving the right to file a divisional application for the subject matter of the non-elected invention. A divisional application to the non-elected invention has been filed concurrently herewith.

Paragraphs 7-12 of the present Office Action set forth rejections of claims 1-27 for obviousness-type double patenting over the claims of co-pending application Serial No. 09/383,703; co-pending application Serial No. 09/259,726; and U.S. Patent No. 5,945,001. In response to these rejections, Applicant submits the duly executed
5 Terminal Disclaimer along with an Assignment in favor of A.B. Technologies, L.L.C. from the inventor William J. Schmidt. The filing of the Assignment and Terminal Disclaimer is deemed to obviate the obviousness-type double patenting rejections and withdrawal of the same is deemed proper and is respectfully requested.

Claim 1 of the present application has been rejected as anticipated over Schmidt
10 et al., (U.S. Patent No. 5,288,408). The rejection is hereby traversed and reconsideration is respectfully requested. As previously indicated, claim 1 has been amended to provide that the solvent based layer is treated with a specific hot filtering process selected from the group consisting of liquid:liquid centrifugation, sub micro/microfiltration, liquid:liquid coalescers, absorbents and filter aids as specifically
15 defined in the specification.

U.S. Patent No. 5,288,408 indicates at column 2, beginning at line 27 that the lower phase is hot filtered to remove any remaining traces of oil or other contaminants and then the filtrate is then charged to a concentration vessel adapted to a vacuum distillation. As indicated beginning at column 4, line 22 the lower phase is hot filtered.
20 A stainless steel filtration equipment may be employed for this purpose such as plate filtered, or a coated plate filter like, for example, a Sparkler Filter. Alternatively, Nutche

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Filters of the Rosenmund-type or cartridge filters may be used for this purpose. While the '408 Patent broadly describes hot filtering, the present application sets forth new techniques for hot filtering which provide advantages over the more rudimentary specific examples disclosed in the '288 Patent, allowing for expansion of the application to more
5 of the gelatin waste streams.

Accordingly, the invention claimed in claim 1 of the present application is not anticipated by Schmidt et al., U.S. Patent No. 5,288,408.

Claims 2-27 stand rejected as anticipated by or in the alternative obvious over Schmidt et al., U.S. Patent No. 5,288,408. The Office Action states that the balance
10 of limitations recited in the depending claims are either expressly disclosed in Schmidt et al., inherent, or obvious in view of that which is conventionally known in the art. The rejection is hereby traversed and reconsideration is respectfully requested.

The disclosure of hot filtration in the '408 Patent has been discussed above. The specific hot filtration systems set forth in the present application and now covered by
15 claims 1-5, 7, 8 and 10-27 of the present application were not known to or employed in any way by gelatin manufacturer's for the purpose of treating a waste material containing gelatin. The state of the art of gelatin waste recovery over the past 50 years remains essentially unchanged. Encapsulation machines haven't changed during this period of time. There have been no advances in waste recovery in 30 years and
20 current methods put the waste in a tank, melt the waste to try to remove the oils, take

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as much as the bottom portion as possible without extracting oils. All of this is done without processes tailored for this purpose and poor rates of recovery are characteristic of industry attempts up to the discovery by Applicant herein as embodied by the '408 Patent. The '408 Patent now provides for the first time technology directed solely to the recovery of waste gelatin from the gelatin capsule manufacturing industry. While the '408 Patent represents a clear advance in the art, several new developments have been made which have advanced the technology significantly.

As embodied in claim 1 as amended, the treatment of the solvent based layer with the specific hot filtering processes mentioned therein enables significant improvements in waste recovery of the gelatin and the commercial efficiency of the process. The present application has broadened commercial viability and applicability beyond the scope of the '408 Patent. Whereas the '408 Patent preferentially treats clear gelatin, the present application has equal viability to all types of gelatin. As previously indicated, the '408 Patent refers to hot filtering but the specific examples are limited to specific filtration devices which, while providing better rates of recovery than what existed in the prior art, does not achieve the levels of recovery as the technology claimed by amended claim 1 and those claims dependent thereon.

Insofar as new claims 44-68 are concerned, there is no teaching or suggestion in the '408 Patent of treating the non-solvent based layer by distillation or reverse osmosis to remove oily components therefrom. As indicated in the '408 Patent the non-solvent "upper phase" is referred to at column 4, lines 9-13. It is stated in the '408

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Patent that the upper phase may contain the lubricating or coating oils, active ingredients, coloring and preservatives which may themselves be subject to certain novel recycling techniques. There is no further description in the '408 specification or claims relating to the types of processes which may be used for this purpose or the type
5 of results achieved thereby. The present application provides detailed systems for carrying out this purpose which are not anticipated by nor rendered obvious over the '408 Patent. It is therefore submitted that new claims 44-68 are patentable over the '408 Patent.

New claim 69 employs a short path distillation system for removing solvent and
10 concentrating the gelatin recovery stream. There is no mention in the '408 Patent of short path distillation or how it could achieve the objects of the invention covered by new claim 69. It is therefore submitted that claim 69 is free of the '408 Patent.

New claim 70 claims hot filtration with prior separation of the aqueous and non-aqueous layers. This aspect of the claimed invention is not disclosed in the '408
15 Patent.

Finally, the '408 Patent is now owned by the Assignee herein A.B. Technologies, L.L.C. as evidenced by the enclosed copy of the recorded Assignment.

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In view of the foregoing, Applicant submits that the present application is in condition for allowance and early passage to issue is therefore deemed proper and is respectfully requested.

Applicant encloses herewith a check in the amount of \$120. However, any additional fees or credit for overpayment should be charged to Deposit Account No. 23-0510.

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